

# (12) United States Patent Jawanda

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### (54) METHOD AND SYSTEM FOR SEAMLESS ROAMING BETWEEN WIRELESS COMMUNICATION NETWORKS WITH A MOBILE TERMINAL

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(56) References Cited

#### U.S. PATENT DOCUMENTS

5,457,680 *	10/1995	Kamm et al 455/432 X
5,600,707 *	2/1997	Miller, II 455/434
5,790,952 *	8/1998	Seazholtz et al 455/432

5,796,727	*	8/1998	Harrison et al	370/338
5,878,343	*	3/1999	Robert et al	455/424
5,930,241	٠	7/1999	Fried	370/328
5,961,607	•	10/1999	Schaefers 45	55/432 X
6,052,589	•	4/2000	Persson et al	455/433

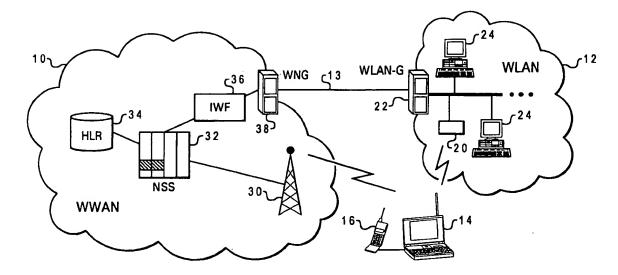
<sup>\*</sup> cited by examiner

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# (57) ABSTRACT

A mobile computer system capable of seamless roaming between wireless communication networks includes data processing resources for executing software, a plurality of wireless interfaces that supports simultaneous wireless connections with first and second wireless communication networks, and a network access arbitrator that routes data communicated between the software executed by the data processing resources and the first and second wireless communication networks. To permit seamless roaming, the network access arbitrator routes the data to the first wireless communication network via a first wireless interface and then seamlessly reroutes the data to a second wireless communication network via a second wireless interface. According to one embodiment, the network access arbitrator reroutes the data in response to the data bandwidths of the connections with the first and second wireless communication networks.

## 11 Claims, 4 Drawing Sheets



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